

# Chapter 17

## Summary of Layer 2 Circuit Configuration Statements

The following sections explain the major protocol configuration statements that apply specifically to Layer 2 circuits. The statements are organized alphabetically. Protocols and the statements at the [edit protocols] hierarchy level are explained in the *JUNOS Internet Software Configuration Guide: Routing and Routing Protocols*.

### interface

<b>Syntax</b>	interface <i>interface-name</i> ;
<b>Hierarchy Level</b>	[edit protocols l2circuit neighbor <i>address</i> ]
<b>Description</b>	Interface over which Layer 2 circuit traffic travels.
<b>Options</b>	<i>interface-name</i> —Name of the interface to configure.
<b>Usage Guidelines</b>	See “Configure the Neighbor and Interface” on page 308.
<b>Required Privilege Level</b>	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

### neighbor

<b>Syntax</b>	neighbor <i>address</i>
<b>Hierarchy Level</b>	[edit protocols l2circuit]
<b>Description</b>	Each Layer 2 circuit is represented by the logical interface connecting the local PE router to the local CE router. All the Layer 2 circuits using a particular remote PE router designated for remote CE routers are listed under the neighbor statement (neighbor designates the PE router). Each neighbor is identified by its IP address and is usually the end-point destination for the LSP tunnel (transporting the Layer 2 circuit).
<b>Options</b>	<i>address</i> —IP address of a neighboring router.
<b>Usage Guidelines</b>	See “Configure the Neighbor and Interface” on page 308.
<b>Required Privilege Level</b>	routing—To view this statement in the configuration. routing-control—To add this statement to the configuration.

## traceoptions

**Syntax** traceoptions {  
     file *filename* <replace> <size *size*> <files *number*> <nostamp>;  
     flag *flag* <flag-modifier> <disable>;  
 }

**Hierarchy Level** [edit protocols l2circuit]

**Description** Trace traffic flowing through a Layer 2 virtual circuit.

**Options** disable—(Optional) Disable the tracing operation. You can use this option to disable a single operation when you have defined a broad group of tracing operations, such as all.

file *filename*—Name of the file to receive the output of the tracing operation. Enclose the name within quotation marks.

files *number*—(Optional) Maximum number of trace files. When a trace file named *trace-file* reaches its maximum size, it is renamed *trace-file.0*, then *trace-file.1*, and so on, until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum number of files, you also must specify a maximum file size with the size option.

**Range:** 2 to 1000

**Default:** 2 files

flag *flag*—Tracing operation to perform. To specify more than one tracing operation, include multiple flag statements.

connections—Layer 2 circuit connections (events and state changes)

error—Error conditions

FEC—Layer 2 circuit advertisements received or sent by means of LDP

topology—Layer 2 circuit topology changes caused by reconfiguration or advertisements received from other PE routers

flag-modifier—(Optional) Modifier for the tracing flag. You can specify the detail modifier if you want to provide detailed trace information.

nostamp—(Optional) Do not place timestamp information at the beginning of each line in the trace file.

**Default:** If you omit this option, timestamp information is placed at the beginning of each line of the tracing output.

replace—(Optional) Replace an existing trace file if there is one.

**Default:** If you do not include this option, tracing output is appended to an existing trace file.

size *size*—(Optional) Maximum size of each trace file, in kilobytes (KB), megabytes (MB), or gigabytes (GB). When a trace file named *trace-file* reaches this size, it is renamed *trace-file.0*. When the *trace-file* again reaches its maximum size, *trace-file.0* is renamed *trace-file.1* and *trace-file* is renamed *trace-file.0*. This renaming scheme continues until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum file size, you also must specify a maximum number of trace files with the *files* option.

**Syntax:** *xk* to specify KB, *xm* to specify MB, or *xg* to specify GB

**Range:** 10 KB through the maximum file size supported on your system

**Default:** 1 MB

**Usage Guidelines** See “Trace Layer 2 Circuit Creation and Changes” on page 309.

**Required Privilege Level** routing—To view this statement in the configuration.  
routing-control—To add this statement to the configuration.

## virtual-circuit-id

**Syntax** virtual-circuit-id *identifier*;

**Hierarchy Level** [edit protocols l2circuit neighbor *address* interface *interface-name*]

**Description** Uniquely identifies a Layer 2 virtual circuit.

**Options** None.

**Usage Guidelines** See “Configure the Virtual Circuit ID” on page 308.

**Required Privilege Level** routing—To view this statement in the configuration.  
routing-control—To add this statement to the configuration.

